thickly grey-puberulent beneath; bracts and peduncles puberulent and comparatively thicker; branchlets puberulent. What is easily noticed in this specimen is the greyish colour of the leaves below, which is found in none of the other specimens of this or other varieties of this species." I feel that it should be compared carefully with var. clemensorum (Mold.) Mold., which also has the leaf-blades grayish beneath.

NOTES ON THE GENUS NASHIA

Harold N. Moldenke

Originally it was my plan to publish a detailed monograph of this genus, as of all the other genera in this family, but lack of time now renders this plan impractical. Yet it is probably worthwhile to place on record the miscellaneous bibliographic and herbarium notes assembled by my wife and myself over the past fifty years. This is the 52nd genus now so treated in this series of papers in Phytologia and elsewhere (Brittonia, Feddes Repert. Spec. Nov., Revist. Sudam. Bot., etc.). Herbarium acronyms employed hereinafter are the same as used in all my previous papers since 1932 and are fully explained in my "Fifth Summary of the Verbenaceae...." (1971), volume 2, pages 195 to 801.

NASHIA Millsp., Field Columb. Mus. Publ. Bot. 2: 176. 1906. Bibliography: Griseb., Cat. Pl. Cub. 215. 1866; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 1, 2: 95. 1894; Millsp., Field Columb. Mus. Publ. Bot. 2: 176--177. 1906; Millsp., Feddes Repert. Spec. Nov. 7: 283--284. 1909; Urb., Symb. Antill. 7: 353. 1912; Prain, Ind. Kew. Suppl. 4, imp. 1, 160. 1913; Fedde & Schust., Justs Bot. Jahresber. 40 (2): 335. 1915; Britton & Millsp., Bahama Fl. 371. 1920; Prain, Ind. Kew. Suppl. 5, imp. 1, 173. 1921; Mold., Phytologia 18: 194. 1922; Urb., Feddes Repert. Spec. Nov. 18: 194--195 (1922) and 20: 344--345. 1924; J. C. Willis, Dict. Flow. Pl., ed. 5, 443. 1925; A. W. Hill, Ind. Kew. Suppl. 7: 139. 1929; Fedde & Schust., Justs Bot. Jahresber. 53 (1): 1074. 1932; Junell, Symb. Bot. Upsal. 1 (4): 34 & 36, fig. 65. 1934; Mold., Suppl. List Comm. Vern. Names 15. 1940; Mold., Phytologia 2: 53--54. 1941; Mold., Suppl. List Inv. Names 5. 1941; Mold., Alph. List Inv. Names 13. 1942; Mold., Known Geogr. Distrib. Verbenac., ed. 1, 24--26 & 96. 1942; Mold., Phytologia 2: 107. 1944; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 2, 2: 95. 1946; Mold., Alph. List Cit. 1: 188. 1946; Mold., Alph. List Inv. Names Suppl. 1: 13--16. 1947; Mold., Phytologia 2: 384 (1947) and 2: 509. 1948; H. N. & A. L. Mold., Pl. Life 2: 30 & 73. 1948; Mold., Alph. List Cit. 3: 928 (1949) and 4: 1144, 1257, & 1258. 1949; Mold., Known Geogr. Distrib. Verbenac., ed. 2, 42, 44, 48, 162, & 191. 1949; J. C. Willis, Dict. Flow. Pl., ed. 6, 443. 1951; E. J. Salisb., Ind. Kew. Suppl. 11: 164. 1953;

Angely, Cat. Estat. Gen. Bot. Fan. 17: 5. 1956; Alain in León & Alain, Fl. Cuba, imp. 1, 4: 280 & 289--291, fig. 125. 1957; Prain, Ind. Kew. Suppl. 4, imp. 2, 160. 1958; Mold., Résumé 52, 310, 311, 315, 317, 318, & 463. 1959; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 3, 2: 95. 1960; Prain, Ind. Kew. Suppl. 5, imp. 2, 173. 1960; F. A. Barkley, List Ord. Fam. Anthoph. 76 & 188. 1965; Mold., Phytologia 12: 20, 27, 28, 37, & 39. 1965; J. Jiménez, Supl. Cat. Fl. Doming. 1: 217. 1966; Rouleau, Guide Ind. Kew. 127 & 352. 1970; Mold., Fifth Summ. 1: 93, 97, 103, 366, & 476 (1971) and 2: 551, 552, 557, 560, 566, 568, 753, & 895. 1971; Airy Shaw in J. C. Willis, Dict. Flow. Pl., ed. 8, 778. 1973; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 280 & 289--291, fig. 125. 1974; Mukherjee & Chanda, Trans. Rose Res. Inst. 41: 41 & 47. 1978; Mold., Phytologia 45: 339 & 508. 1980.

Pubescent shrubs, mostly spiny or becoming spiny, aromatic; stems tetragonal; branches mostly grayish; leaves decussate-opposite or fasciculate, exstipulate, simple, mostly glandular-punctate beneath; inflorescence small, capitate; peduncles grayish; flowers hypogynous, complete; calyx short, annulate and subtruncate or shortly 2-lobulate, rarely with 2 apparently free sepals; corolla white, only very obscurely zygomorphic, tubular or campanulate, small, the limb 4-lobulate, the lobes subequal, valvate in bud; stamens 4, didynamous, subequal, inserted in the corolla-tube; ovary superior, 2-locular; fruit small, drupaceous,

the pyrenes bony, coherent.

A small Antillean genus of 7 species, native to the Bahamas, Cuba, and Hispaniola, closely related to Lippia Houst. June11 (1934) illustrates a cross-section of the ovary. Urban (1912) comments that the "Genus a cl. Millspaugh propositum cum Lippia conjugendum est; nam in speciminibus laudatis ullum discrimen a genere ulteriore frustra quaesivi. Calyx non in annulum reductus est, sed e sepalis 2 liberis sublinearibus transversim positis more aliarum Lippiae specierum constat et corollae aestivatio more Verbenacearum imbricativa (nec valvata) est." In spite of these observations, however, I still feel that this small group of extremely closely related taxa are so manifestly distinct from those of the very large and variable genus Lippia that they deserve generic rank. The "2 free sepals", fleshy attractively colored fruit, and spinose habit certainly are not seen in Lippia.

An artificial key to the accepted species:

1. Branches conspicuously spinose.

2. Native to Cuba only.

N. armata.

4. Native to Cuba only.

 Heads few-flowered, hemispheric or oblong-ovoid; leafblades 1--4-dentate.

6. Leaf-blades with whitish scales on the upper surface;

NASHIA ARMATA (Urb.) Mold., Phytologia 2: 53. 1941.
Synonymy: Lippia armata Urb., Feddes Repert, Spec Nov. 18

Synonymy: Lippia armata Urb., Feddes Repert. Spec Nov. 18: 194. 1922.

Bibliography: Urb., Feddes Repert. Spec. Nov. 18: 194. 1922; A. W. Hill, Ind. Kew. Suppl. 7: 139. 1929; Fedde & Schust., Justs Bot. Jahresber. 53 (1): 1074. 1932; Mold., Phytologia 2: 53. 1941; Mold., Alph. List Inv. Names Suppl. 1: 13. 1947; Mold., Known Geogr. Distrib. Verbenac., ed. 1, 25 & 96 (1942) and ed. 2, 44 & 191. 1949; Mold., Alph. List Cit. 4: 1257. 1949; E. J. Salisb., Ind. Kew. Suppl. 11: 164. 1953; Alain in Leon & Alain, Fl. Cuba, imp. 1, 289 & 290. 1957; Mold., Résumé 52, 310, & 463. 1959; Mold., Fifth Summ. 1: 97 (1971) and 2: 551 & 895. 1971; Alain in Leon & Alain, Fl. Cuba, imp. 2, 2: 289 & 290. 1974.

A shrub; branches rigid, straight, tetragonal, densely pilose with very short, antrorsely curved, finally nigrescent hairs; branchlets ending in spines; leaves sessile or on petioles only 0.5 mm. long; leaf-blades rather thick, very rigid, oblong or narrowly obovate, 3-8 mm. long, 1.5-4 mm. wide, apically obtuse or rounded, basally obtuse, marginally entire and tightly revolute, shiny and scabrous above, pilose with very short hairs that are basally incrassate, nigrescent in drying, pilosulous beneath with minute gray hairs; midrib deeply impressed above; secondaries 1 or 2 per side, impressed above, prominulent or flat and obscure beneath; inflorescence axillary, capitate, sessile, small, fewflowered; bracts suborbicular, apically shortly or very shortly acuminate, very shortly appressed-pilose on the back; on young flowers the calyx reduced to a very short annulus, without lobes, the corolla-tube externally glabrous, the 4 lobes dorsally minutely pilosulous; stigma ovate, oblique.

This rare endemic species is based on *Ekman 9220* from calcareous hillsides on the coast of Aguadores, Santiago, in Oriente, Cuba, collected on June 14, 1918, and deposited in the Stockholm herbarium. The species is known thus far only from the original collection.

Urban (1922) compares N. armata with N. cayensis and notes that the latter differs in its slender, pendent, unarmed branches, its ovate to elliptic, apically obtuse or acute leaves which are 15 mm. long and 5--9 mm. wide, its many-flowered heads, and two narrowly spatulate sepals. "Multo magis affinis est L[ippia] inaguensis (Millsp.) Urb. ex ins. Baham., quae ramis raro vix spinescentibus breviter et molliter villosulis, nervis foliorum lateralibus utroque latere 3--5, bracteis obovato-spathulatis, calycis lobis 2 evolutis (an etiam corollas characteribus?) recedit."

Citations: CUBA: Oriente: Ekman 9220 (F--photo of type, N--iso-

type, N--photo of type, S--type, S--isotype, Si--photo of type, Z--photo of type).

NASHIA CAYENSIS Britton, Bull. Torrey Bot. Club 42: 517. 1915. Synonymy: Lippia cayensis (Britton) Urb., Feddes Repert. Spec. Nov. 18: 195. 1922. Lippia cayensis Urb. apud A. W. Hill, Ind. Kew. Suppl. 7: 139. 1929.

Bibliography: N. L. Britton, Bull. Torrey Bot. Club 42: 517. 1915; Prain, Ind. Kew. Suppl. 5, imp. 1, 173. 1921; Urb., Feddes Repert. Spec. Nov. 18: 195. 1922; A. W. Hill, Ind. Kew. Suppl. 7: 139. 1929; Fedde & Schust., Justs Bot. Jahresber. 53 (1): 1074. 1932; Junell, Symb. Bot. Upsal. 1 (4): 34 & 36, fig. 65. 1934; Mold., Known Geogr. Distrib. Verbenac., ed. 1, 25 & 96 (1942) and ed. 2, 44 & 191. 1949; Mold., Alph. List Cit. 3: 928. 1949; Alain in Leon & Alain, Fl. Cuba, imp. 1, 4: 289--291, fig. 125. 1957; Mold., Résumé 52, 311, & 463. 1959; Mold., Fifth Summ. 1: 97 (1971) and 2: 552 & 895. 1971; Alain in Leon & Alain, Fl. Cuba, imp. 2, 2: 289--291, fig. 125. 1974.

Illustrations: Junell, Symb. Bot. Upsal. 1 (4): fig. 65. 1934; Alain in León & Alain, Fl. Cuba, imp. 1, 4: 290, fig. 125 (1957) and imp. 2: 290, fig. 125. 1974.

A densely branched aromatic shrub; branches slender, pendent, finely rough-pubescent; petioles about 1 mm. long; leaf-blades ovate to elliptic, 15 mm. long or less, 5--9 mm. wide, apically obtuse or acutish, basally mostly rounded, scabrous above, pubescent and glandulose beneath, strongly few-veined, the venation impressed above, prominent beneath; heads solitary in the leaf-axils, subsessile, globular and about 5 mm. in diameter when in anthesis, oblong-cylindric and 10--15 mm. long in fruit, densely many-flowered; bracts broadly ovate to obovate, about 3 mm. long, pubescent, marginally ciliate; calyx of 2 narrowly spatulate sepals nearly as long as the corolla; corolla greenish, scarcely longer than the bracts, the somewhat irregular limb about as long as the campanulate tube; filaments very short; fruit orange-red, about 2 mm. in diameter.

This endemic species is based on *Shafer 2450* from near Pueblo Romano, Cayo Romano, Camagüey, Cuba, collected on October 8 or 9, 1908, and deposited in the Britton Herbarium at the New York Botanical Garden.

Britton (1915) notes "Similar to Lippia myrtifolia Griseb., and clearly congeneric with the generic type, N[ashia] inaguensis Millsp." Junell (1934) provides an illustration of a cross-section of the ovary.

The species is thus far known only from the original collection.

Citations: CUBA: Camagüey: Shafer 2450 (N--type).

NASHIA INAGUENSIS Millsp., Field Columb. Mus. Publ. Bot. 2: 177.

Synonymy: Lippia inaguensis (Millsp.) Urb., Symb. Antill. 7: 353. 1912. Lippia inaguensis Urb. apud Prain, Ind. Kew. Suppl. 5,

imp. 1, 153. 1921. Nashia inagensis Riser, in litt.
 Bibliography: Millsp., Field Columb. Mus. Bot. 2: 177. 1906;
Millsp., Feddes Repert. Spec. Nov. 7: 283--284. 1909; Urb., Symb.
Antill. 7: 353. 1912; Prain, Ind. Kew. Suppl. 4, imp. 1, 160.
1913; Fedde & Schust., Justs Bot. Jahresber. 40 (2): 335. 1915;
Britton & Millsp., Bahama Fl. 371. 1920; Urb., Feddes Repert.
Spec. Nov. 18: 195. 1922; Mold., Suppl. List Comm. Vern. Names 15.
1940; Mold., Suppl. List Inv. Names 5. 1941; Mold., Alph. List
Inv. Names 31. 1942; Mold., Known Geogr. Distrib. Verbenac., ed.
1, 24 & 96. 1942; Mold., Phytologia 2: 107. 1944; Mold., Known
Geogr. Distrib. Verbenac., ed. 2, 42, 162, & 191. 1949; Prain, Ind.
Kew. Suppl. 4, imp. 2, 160. 1958; Mold., Résumé 50, 220, & 463.
1959; Prain, Ind. Kew. Suppl. 5, imp. 2, 153. 1960; Mold., Fifth
Summ. 1: 93 & 366 (1971) and 2: 557 & 895. 1971.

An unarmed shrub or stout straggling bush, 1.5--2 m. tall, with the odor of citronella; branches stout, opposite, strong, terete to tetragonal, issuing at right angles; trunk 4--5 dm. tall, 3--4 cm. in diameter; bark rosy-gray, exfoliating longitudinally; leaves very short-petiolate on the branchlets, "baculatum et lanatum in fasciculi dispositis", the leaf-blades ovate or obovate to spatulate or lingulate, 5--8 mm. long, 3--5 mm. wide, apically obtuse, basally attenuate, conspicuously reticulate-rugose and strigose above, strigose-tomentose beneath, marginally entire and revolute in drying; inflorescence sessile, borne on the median portion of the branchlets; flowers 6--8; corolla white, the tube orange-yellow; bracts rutelliform, longer than the flowers, about 2.5 mm. long and 2 mm. wide, apically apiculate, marginally ciliate; calyx minute, annular, dentate, ciliate, persistent on the rachis; corolla campanulate, the lobes equal, the 2 exterior ones large, apically emarginate, basally auriculate, the 2 inner ones entire; stigma peltate, sagittate after anthesis; style included; filaments abbreviated, inserted at about one-third the length of the corolla-tube; drupe pyriform, fleshy, 3 mm. long, 4 mm. wide. the nutlets hard, smooth, 2.5 mm. long, 3.5 mm. wide.

Millspaugh (1906) based this endemic spcies on Nash & Taylor 1006 from the scrublands back of Matthew Town, Inagua, Bahama Islands, collected on October 13, 1904, and deposited in the Britton Herbarium at the New York Botanical Garden. He cites also Nash & Taylor 1454 from the same locality (topotype) and notes "A sheet also found in the Hitchcock collection marked 'Lantana sp. from Inagua Dec. 3, 1890'. Mr. Brace sends a small specimen of the species from a garden in Nassau 'where it was planted from Inagua'. It is well known to the natives, who use the leaves in decoction as a febrifuge known as 'Mountain Tea'."

Collectors describe this species as a shrub, 1--2 m. tall, resinously aromatic, the branches spreading-arching, and the fruit orange or brown-orange in color, translucent, and have found the plant growing in scrub and coppices and along rock walls, in flower in March and November, in fruit in August. The corollas are said to have been "white" on Gillis 7510 & 13097. A wood sample accompanies Nash & Taylor 1454.

Vernacular names reported for ${\it N_{\circ}}$ inaguensis are "Mougean tea", "moujean tea", "mountain tea", and "tea-bush".

Gilles asserts that this plant "would make a good hedge plant". His no. 7510, collected in Florida, was grown there from seed

imported from Great Exuma in the Bahama Islands.

Fedde & Schuster (1915) cite only Rothrock 383 from the Bahamas. Christopher Riser, in a letter to me dated July 27, 1970, says "I have observed N_{\circ} inagensis around Mathewtown, Long Island, Bahamas, where it is endemic", but in a later undated letter to my wife he says "I did not find N_{\circ} inagensis on Long Island and am sorry that my carelessness allowed me to send that statement. I did look for it on Long Island but was unsuccessful [in finding it]."

Citations: BAHAMA ISLANDS: Great Inagua: D. S. Correll 41660 (N), 46036 (N). Inagua: Gillis 13097 (Ld); Nash & Taylor 1454 (N, N). CULTIVATED: Bahama Islands: Brace s.n. [Nov. 14, 1904] (N). Florida: Gillis 7510 (Ba, Ft--2473).

NASHIA MYRTIFOLIA (Griseb.) Mold., Phytologia 2: 53. 1941.

Synonymy: Lippia myrtifolia Griseb., Cat. P1. Cub. 215. 1866.
Bibliography: Griseb., Cat. P1. Cub. 215. 1866; Jacks. in Hook.
f. & Jacks., Ind. Kew., imp. 1, 2: 95. 1894; Mold., Phytologia 2:
53. 1941; Mold., Known Geogr. Distrib. Verbenac., ed. 1, 25 & 96.
1942; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 2, 2: 95. 1946;
Mold., Alph. List Cit. 4: 1144. 1949; Mold., Known Geogr. Distrib.
Verbenac., ed. 2, 49 & 191. 1949; E. J. Salisb., Ind. Kew. Suppl.
11: 164. 1953; Alain in León & Alain, F1. Cuba, imp. 1, 4: 389—
290. 1957; Mold., Résumé 52 & 463. 1959; Jacks. in Hook. f. &
Jacks., Ind. Kew., imp. 3, 2: 95. 1960; Mold., Fifth Summ. 1: 97
(1971) and 2: 560 & 895. 1971; Alain in León & Alain, F1. Cuba,
imp. 2, 2: 289—290. 1974.

A shrub; branches rufescent-puberulent, with axillary spines; leaves ovate-oblong, 1--2 cm. long, apically obtuse to subacute, marginally entire, basally rounded, somewhat scabrous above with scaly-based hairs, glandulose and smooth beneath; heads globose, 4--6 mm. in diameter, short-pedunculate; bractlets concave-subrotund, apically acute and recurved; sepals 2, lanceolate, apically obtuse, hispidulous; corolla about 2--3 mm. long, apically 4-lobulate.

This rare endemic eastern Cuban species is based on Charles Wright 3160, collected in Oriente between 1860 and 1864 and probably deposited in the Göttingen herbarium. Grisebach (1866) proposed a new Section, Diphyllocalyx Griseb., in the genus Lippia to accomodate this taxon. Wright comments "leaves glabrous, acute". Thus far, the taxon is known to me only from the original collection.

Citations: CUBA: Oriente: *C. Wright 3160* [Herb. Sauvalle 1759] (F--photo of isotype, Hv--isotype, Hv--isotype, N--isotype, N--photo of isotype, Si--photo of isotype, Z--photo of isotype).

NASHIA NIPENSIS (Urb.) Mold., Phytologia 2: 54. 1941. Synonymy: Lippia nipensis Urb., Feddes Repert. Spec. Nov. 20: 344--345. 1924.

Bibliography: Urb., Feddes Repert. Spec. Nov. 20: 344--345. 1924; A. W. Hill, Ind. Kew. Suppl. 7: 139. 1929; Fedde & Schust., Justs Bot. Jahresber. 53 (1): 1074. 1932; Mold., Phytologia 2: 54 (1941) and 2: 384. 1947; Mold., Alph. List Inv. Names Suppl. 1: 14. 1947; Mold., Alph. List Cit. 4: 1258. 1949; Mold., Known Geogr. Distrib. Verbenac., ed. 2, 44 & 191. 1949; E. J. Salisb., Ind. Kew. Suppl. 11: 164. 1953; Alain in León & Alain, Fl. Cuba, imp. 1, 4: 289 & 290. 1957; Mold., Résumé 52, 315, & 463. 1959; Mold., Fifth Summ. 1: 97 (1971) and 2: 566 & 895. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 289 & 290. 1974.

An unarmed shrub or the branchlets occasionally spinescent; branches straight, tetragonal; youngest branchlets of the current year pilose with minute upwardly curvate hairs; leaves subsessile or with petioles scarcely 0.5 mm. long; leaf-blades rigidly coriaceous, ovate, 7--10 mm. long, 4.5--7 mm. wide, apically obtuse, basally rounded or very slightly emarginate, the midrib impressed above and the few secondaries more or less impressed or not conspicuous, the secondaries slightly prominulent beneath and united in a reticulum of veinlets, marginally entire or with a single, unilateral, recurved, and revolute tooth, the upper surface covered with small white orbs which often bear a very short hair at their center, otherwise glabrous and shiny, the lower surface minutely punctate and sparsely pilosulous along the venation; peduncles about 3 mm. long; heads semiglobose, to 5 mm. in diameter, about 12flowered, globular or shortly ovate and to 8 mm. long and 6 mm. wide in fruit; basal bracts shortly obovate or obovate-rhomboid, about 3 mm. long, apically acute, recurved; sepals 2, free, oblanceolate-linear, almost 2 mm. long; corolla yellow, 3 mm. long, apically pilose, the tube cylindric, 0.3 mm. in diameter. apically ampliate, the limb 3-lobed, the lobes semiorbicular, 1/4 as long as the tube, the rear one suborbicular; stamens inserted in the corolla-tube; anthers subsessile, included; style 0.8 mm. long; stigma oblique; fruit spherical, 2 mm. long, 2.8 mm. wide, shiny, not splitting into separate pyrenes on maturity.

This rare endemic eastern Cuban species is based on Ekman 15044 from pinewoods, at about 300 m. altitude, near Rio Piloto, Sierra de Nipe, Oriente, Cuba, collected in anthesis and fruit in September. Urban (1924) comments: "Fortasse affinis L[ippia] inaguensis (Millsp.) Urb. quae pube. foliis oblongis, nervis numerosioribus, orbiculis supra nullis (an etiam floribus frustibusque, mihi non visis?) recedit. L. cayensis (Britton) Urb. foliis usque 15 mm. longis 6--9 mm. latis supra scabridis, capitulis fructiferis oblongo-cylindricis 10--15 mm. longis ex descriptione diversa est. L. myrtifolia Griseb. spinis axillaribus, foliis usque 2 mm. longe petiolatis, pluries majoribus, nervis numerosioribus subtus bene prominentibus discrepat". Nashia nipensis is known thus far only from the original collection.

Citations: CUBA: Oriente: Ekman 15044 (F--photo of type, N--isotype, N--photo of type, S--type, S--isotype, Si--photo of type, W--2113437--isotype, Z--photo of type).

NASHIA SPINIFERA (Urb.) Mold., Phytologia 2: 54. 1941.

Synonymy: Lippia spinifera Urb., Feddes Repert. Spec. Nov. 18: 195. 1922.

Bibliography: Urb., Feddes Repert. Spec. Nov. 18: 195. 1922;
A. W. Hill, Ind. Kew. Suppl. 7: 139. 1929; Fedde & Schust., Justs
Bot. Jahresber. 53 (1): 1074. 1932; Mold., Phytologia 2: 54. 1941;
Mold., Known Geogr. Distrib. Verbenac., ed. 1, 26 & 96. 1942;
Mold., Alph. List Cit. 1: 188. 1946; Mold., Alph. List Inv. Names
Suppl. 1: 15. 1947; Mold., Alph. List Cit. 4: 1258. 1949; Mold.,
Known Geogr. Distrib. Verbenac., ed. 2, 48 & 191. 1949; E. J.
Salisb., Ind. Kew. Suppl. 11: 164. 1953; Mold., Résumé 57, 317, &
463. 1959; J. Jiménez, Cat. Fl. Doming. Supl. 1: 217. 1966; Mold.,
Fifth Summ. 1: 103 (1971) and 2: 566 & 895. 1971.

A shrub, 2--3 m. tall; branches straight, obtusely tetragonal, the younger parts covered with minute upwardly curvate hairs; branchlets often converted into spines, 5--10 mm. long, paired at the base of the leaves, often bearing 1 or 2 pairs of scales apically; leaves subsessile or on a petiole 0.5 mm. long, obovate to ovate or elliptic, 3--7 mm. long, 2--3 mm. wide, apically obtuse or rounded, basally obtuse, the midrib impressed to the apex above, prominent beneath, the secondaries absent, the blades smooth or minutely scabridulous and shiny above, nigrescent in drying, olivaceous beneath, very shortly appressed-pilose or scabrous on the midrib, rigid, rather thick-textured, marginally recurved or revolute; inflorescence axillary, sessile, capitate, few-flowered, 2--2.5 mm. in diameter; bracts broadly orbicular, apically rounded or subtruncate or sometimes very shortly apiculate, 1.3--1.8 mm. wide; calyx subcampanulate, 2 mm. long, glabrous, the lobes 2, hardly semilunate, apically depressed-rounded, the rim sparsely and very shortly pilose; corolla white, glabrous, scarcely 3 mm, long, the tube cylindric, apically scarcely ampliate, the lobes of the limb 4, orbicular, half as long as the tube; stamens inserted at the middle of the corolla-tube; filaments very short; anthers ovate; style 1 mm. long; stigma depressed-capitate, subbilateral; fruit globular, shiny, 2--2.5 mm. in diameter.

This rare endemic Haitian species is based on Buch 1994 from sunny thickets, at 1800 m. altitude, Morne Tranchant, Haiti, collected in flower and fruit in September, deposited in the Berlin herbarium, now probably destroyed. Ekman encountered it in thickets on eruptive slopes, at 1700--1920 m. altitude, flowering in July. Urban (1922) comments: "A praecedente [N. armata] habitu simili spinis brevibus, foliis evenosis laevibus vel raro minute scabriusculis, calyce bene evoluto, corolla glabra optime diversa".

Citations: HISPANIOLA: Haiti: Ekman H.1166 (Ld), H.1166a (S), H.1166b (N, S).

NASHIA VARIIFOLIA (Urb.) Mold., Phytologia 2: 54. 1941.

Synonymy: Lippia variifolia Urb., Feddes Repert. Spec. Nov. 20: 344. 1924.

Bibliography: Urb., Feddes Repert. Spec. Nov. 20: 344. 1924; A. W. Hill, Ind. Kew. Suppl. 7: 139. 1929; Fedde & Schust., Justs Bot. Jahresber. 53 (1): 1074. 1932; Mold., Phytologia 2: 54. 1941; Mold., Known Geogr. Distrib. Verbenac., ed. 1, 25 & 96. 1942; Mold., Alph. List Inv. Names Suppl. 1: 16. 1947; Mold., Alph. List Cit. 4: 1258. 1949; Mold., Known Geogr. Distrib. Verbenac., ed. 2, 44 & 191. 1949; E. J. Salisb., Ind. Kew. Suppl. 11: 164. 1953; Alain in León & Alain, Fl. Cuba, imp. 1, 289-291. 1957; Mold., Résumé 52, 318, & 463. 1959; Mold., Fifth Summ. 1: 97 (1971) and 2: 568 & 895. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 289-291. 1974.

A small shrub; branches tetragonal, the younger ones pilose with very short slightly curvate hairs; branchlets often transformed into spines or with the apex spinose; petioles 0.5--1 mm. long; leaf-blades subcoriaceous, rigid, very variable on each branch or branchlet, varying from orbicular, ovate, obovate, or elliptic to narrowly oblong, 4--12 mm. long, 2--6 mm. wide, apically rounded to obtuse or subobtuse, basally acute to obtuse, marginally with 1 or 2 teeth per side, scabrous above with short basally-inflated hairs, pilose along the venation beneath or subglabrous, the midrib and 2--4 secondaries sulcate-impressed above, prominent beneath, not reticulate-joined; peduncles to 3 mm. long in anthesis; heads semiglobose, to 6 mm, wide; basal bracts semi-oval or triangular, about 2.5 mm. wide, apically obtuse or rounded, marginally recurved; sepals 2, free, oblanceolate or oblanceolate-linear, about 1.5 mm. long, dorsally pilose; corolla 3 mm. long, apically pilosulous, the tube infundibular, the anterior 3 lobes of the limb semiorbicular, the posterior lobe twice as long and ovate-triangular, apically truncate; stamens inserted in the corolla-tube; anthers subsessile, included; style 1 mm. long; stigma unilateral.

This rare endemic Cuban species is based on Ekman 15542 from among limestone rocks near Pastelillo, Camagüey, Cuba, collected in anthesis in December, deposited in the Stockholm herbarium. The species is known thus far only from the original collection.

Citations: CUBA: Camagüey: Ekman 15542 (F--photo of type, N--isotype, N--photo of type, S--type, S--isotype, Si--photo of type, Z--photo of type).

NOTES ON THE GENUS KALAHARIA

Harold N. Moldenke

Although our original intention was to prepare a complete and detailed monograph of this genus, as of all the other genera in this large and complex family, lack of available time now has rendered this plan untenable. It has seemed worthwhile, however, to place on record the miscellaneous notes, chiefly bibliographic and herbarium-derived, assembled on this genus by my wife and myself over the past fifty years, this being the 53rd genus so treated. The herbarium acronyms employed hereinafter are the same as those used by